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EXAMINER

CERVETTI, DAVID GARCIA

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/898,286	Applicant(s) TREMAIN, GEOFFREY DONALD	
	Examiner DAVID CERVETTI	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed January 25, 2008, have been fully considered.
2. Claims 1-74 are pending and have been examined.

Response to Amendment

3. Applicant's arguments with respect to the prior art have been considered but are moot in view of the new ground(s) of rejection.

4. *The applicant has not traversed the examiner's use of official notice with regards to the claimed limitations found in claims 4, 12, 23, 30, 40, and 47, these features are taken by the examiner to be admitted prior art since the applicant has not adequately challenged the examiner's use of official notice (see MPEP 2144.03(c), 2144.04).*

5. While the elements must be arranged as required by the claim, this is not an ipsissimis verbis test, i.e., identity of terminology is not required. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Note that, in some circumstances, it is permissible to use multiple references in a 35 U.S.C. 102 rejection. See MPEP § 2131.01.

6. Regarding the arguments about the drawings, Examiner would like to direct Applicant's attention to the drawings found in the prior art submitted, more specifically, "VMWare Virtual Platform Technical White Paper" shows the elements as shown in Applicant's drawings, even if some of the elements are not shown, a generalization of the elements is, i.e. multiple servers interconnected may not be shown, but a servers with multiple virtual servers on it is.

7. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

8. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Drawings

9. Figure 1-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

10. Claims 13, 41, 48, and 54 are objected to because of the following informalities: "intellectual property", the quotations need to be removed for the limitation to be considered. Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 1-3, 5-11, 13-22, 24-29, 31-39, 41-46, and 48-74 are rejected under 35 U.S.C. 102(a) as being anticipated by Newman (NPL. “Application Outsourcing: the next big thing on the internet”, hereinafter Newman).

Regarding claim 1, Newman teaches

apparatus operated by a computer service provider and providing one or more computer services for a plurality of customers of the computer service provider, the apparatus comprising **(pp.5-6)**:

a real computer, operated by a computer service provider and coupled to a real network, on which is set up at the request of each of a plurality of customers of the computer service provider at least one virtual machine for each of said customers **(pp.7-9)**;

wherein said at least one virtual machine for each of said customers is configured to provide one or more computer services over the real network for each respective customer (pp.7-9); and

wherein said at least one virtual machine for each of said customers comprises a specification specified by and configurable by the respective customer, and further comprises a separate operating system running thereon (pp.5-8).

Regarding claim 20, Newman teaches

a method of providing one or more computer services for a plurality of customers of a computer service provider, the method comprising the steps of **(pp.5-6)**:

a service provider setting up on a real computer, at the request of each of said customers, at least one virtual machine for each of said customers of the computer service provider whereby each virtual machine for each of said customers is configured to provide one or more computer services over a real network for each respective customer **(pp.5-8)**;

the real computer accepting specification and configuration information for the virtual machines from each of said customers whereby the specification of each of the virtual machines is specified by and configurable by the respective customer, each virtual machine comprising a separate operating system running thereon **(pp.7-9)**.

Regarding claim 37, Newman teaches

a method of operating a real computer on behalf of a plurality of customers of an operator of the real computer, the method comprising the steps of **(pp.5-6)**:

operating a plurality of virtual machines on the real computer so as to provide respective computer services for the respective customers over a real network **(pp.7-9)**;
and

receiving at each of said plural virtual machines a specification specified by and configurable by a respective one of the customers of the operator of the real computer in accordance with a computer service to be provided by the virtual machine on behalf of that customer **(pp.6-9)**;

wherein each of said virtual machines comprises a separate operating system running thereon **(pp.6-9)**.

Regarding claim 54, Newman teaches

a method of providing for a plurality of customers of an operator of a real computer one or more computer services selected from: file, data and archiving services; applications hosting services; database hosting services; data warehouse services; knowledge management hosting services; digital media production services; "intellectual property" and streaming media services; simple web hosting services; complex e-Commerce web hosting services; high performance computation services; electronic messaging and conferencing services; and, learning neuro-computer services; the method comprising the steps of **(pp.5-6, 10-12)**:

said operator setting up on said real computer at the request of each of said customers at least one virtual machine for each of said customers of the operator to provide one or more computer services for each of said customers over a real networks **(pp.5-9)**; and

receiving at said at least one virtual machine for each of said customers a specification determined in accordance with the computer service or services requested by said customer and configurable by said customer, said at least one virtual machine having a separate operating system running thereon **(pp.4-12)**.

Regarding claims 2, 21, and 38, Newman teaches wherein plural virtual machines are set up within the real computer for at least one of said customers **(pp.4-12)**.

Regarding claims 3, 22, and 39, Newman teaches wherein the or each virtual machine for at least one of said customers is connected to a virtual network set up for said at least one customer within the real computer **(pp.4-12)**.

Regarding claims 5, 24, and 41, Newman teaches wherein at least one virtual machine is connected to a virtual firewall that is connectable to an external network to which customers and/or other users can connect such that access to said at least one virtual machine by a customer or other user via a said external network can only take place through a virtual firewall **(pp.4-12)**.

Regarding claims 6, 25, and 42, Newman teaches wherein the or each virtual machine for a particular customer is connected to a virtual firewall that is dedicated to that customer's virtual machine or machines, each virtual firewall being connectable to an external network to which each of said customers and/or other users can connect such that access to a virtual machine by a customer or other user via a said external network can only take place through a virtual firewall provided for that virtual machine or machines **(pp.4-12)**.

Regarding claims 7, 26, and 43, Newman teaches wherein each virtual firewall is set up within the real computer, the or each virtual machine for each customer being connected to a first port of the virtual firewall that is dedicated to that customer's virtual machine or machines, each virtual firewall having a second port connected to a virtual network that is set up within the real computer and that is connectable to an external network **(pp.4-12)**.

Regarding claims 8, 27, and 44, Newman teaches wherein the second port of each virtual firewall is connected to the same virtual network that is set up within the real computer and that is connectable to an external network **(pp.4-12)**.

Regarding claim 9, Newman teaches wherein the or at least one of the virtual firewalls is implemented by a virtual machine on the real computer, said virtual firewall virtual machine running firewall software **(pp.8-12)**.

Regarding claims 10, 28, and 45, Newman teaches comprising a plurality of real data storage devices and at least one virtual storage subsystem that is configured to allow said real data storage devices to emulate one or more virtual storage devices **(pp.4-12)**.

Regarding claims 11, 29, and 46, Newman teaches wherein the at least one virtual storage subsystem is configured to emulate at least one respective virtual storage device for each customer **(pp.4-12)**.

Regarding claims 13, 31, and 48, Newman teaches wherein the apparatus is configurable to provide at least one of the services selected from: file, data and archiving services; applications hosting services; database hosting services; data warehouse services; knowledge management hosting services; digital media production services; "intellectual property" and streaming media services; simple web hosting services; complex e-Commerce web hosting services; high performance computation services; electronic messaging and conferencing services; and, learning neuro-computer services **(pp.4-12)**.

Regarding claims 14, 32, and 49, Newman teaches comprising virtual private network software to provide an encrypted communication channel for communication between at least some of said virtual machines **(pp.4-12)**.

Regarding claims 15, 33, and 50, Newman teaches comprising virtual private network software to provide an encrypted communication channel for communication between at least one virtual machine and an external computer **(pp.4-12)**.

Regarding claims 16, 34, and 51, Newman teaches comprising virtual private network software to provide an encrypted communication channel for communication between a first virtual network and a second virtual network **(pp.4-12)**.

Regarding claims 17, 35, and 52, Newman teaches comprising virtual private network software to provide an encrypted communication channel for communication between a virtual network and an external computer **(pp.4-12)**.

Regarding claim 18, Newman teaches wherein the real computer comprises plural physical computers **(pp.4-12)**.

Regarding claim 19, Newman teaches in combination, a first apparatus according to claim 1 and a second apparatus that is substantially identical to said first apparatus, the first and second apparatus being connected by a communications channel so that the second apparatus can provide for redundancy of the first apparatus thereby to provide for disaster recovery if the first apparatus fails **(pp.4-12)**.

Regarding claims 36, 53, and 55, Newman teaches comprising the step of moving said at least one virtual machine from a first real computer to a second real computer **(pp.4-12)**.

Regarding claims 56, 59, and 62, Newman teaches wherein at least one of said virtual machines provides at least a virtual central processor unit **(pp.5-9)**.

Regarding claims 57, 60, and 63, Newman teaches wherein at least one of said virtual machines is created using a virtual machine abstraction program **(pp.5-9)**.

Regarding claims 58, 61, and 64, Newman teaches wherein at least one of said virtual machines is created using machine simulation/emulation software **(pp.5-9)**.

Regarding claim 68, Newman teaches a system configurator program that accepts said specification from each of said customers, said configurator program being operable to modify, based on said specification, the configuration of said at least one virtual machine **(pp.5-12)**.

Regarding claims 65-67 and 69-74, Newman teaches wherein said real computer accepting said specification comprises accepting said specification over said real / virtual network or another real network **(pp.5-12)**.

Claim Rejections - 35 USC § 103

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

14. Claims 4, 12, 23, 30, 40, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman.

Regarding claims 4, 12, 23, 30, 40, and 47, Newman does not expressly disclose the features of the above mentioned claims. However, these features have been admitted per applicant to have been conventional and well known to digital rights management systems at the time the invention was made.

Conclusion

15. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CERVETTI whose telephone number is (571)272-5861. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David García Cervetti/
Examiner, Art Unit 2136